

Fake Terrorism: Examining Terrorist Groups' Resort to Hoaxing as a Mode of Attack

by Nicole A. Tishler

Editor's Note:

The opening article of this issue has been written by invitation of the chairman of the jury of the Terrorism Research Initiative. It summarises some aspects of the doctoral dissertation of Nicole Tishler, "Fake Terrorism: Examining Terrorist Groups' Resort to Hoaxing as a Mode of Attack" (Carleton University) for which she just won the TRI Award for the best Ph.D. thesis in the field of terrorism studies written in 2017. For more information on the Award, see the Announcement at the end of this issue of Perspectives on Terrorism.

Abstract

Little academic attention has been accorded to terrorism hoaxes - i.e. those incidents that are believed to be serious acts of terrorism, but by virtue of involving benign agents or empty threats do not actually involve any direct risk of harm. Hoaxes do, however, impose costs on society. These indirect costs range from wasted emergency response resources to heightened levels of societal fear. This article draws from extensive multi-method research designed to explore the strategic logic(s) underpinning hoax behaviour. It summarizes findings in answer to a preliminary question: what characteristics differentiate groups who incorporate hoaxes into their attack profiles from those who never do? Hypotheses encompass groups' overarching motivation (animal rights, environmentalist, or anti-abortionist; ethno-nationalist; religious), organizational structure (hierarchy and the lack thereof), and campaign context (splinter origins; frequency of real attacks). A robust set of differentiating characteristics is determined using Qualitative Comparative Analysis (QCA) on two different perpetrator samples: a cross-national sample, drawing on perpetrators identified in the Monterey Weapons of Mass Destruction (WMD) Terrorism Database; and a secondary sample based on perpetrators identified in the Canadian Incident Database (CIDB). Although the QCA analysis generates clear predictors of hoax use and non-use, the observational nature of the data is limited in its ability to clarify hoaxers' strategic logics, which are both over-determined and equifinal.

Keywords: terrorism, hoax, strategy, tactics, qualitative comparative analysis (QCA), events datasets

Introduction

Terrorism hoaxes are those incidents that are believed to be serious acts of terrorism, but do not actually involve any direct risk of harm. This definition encompasses a range of terrorist activities, including false claims of responsibility,[1] empty threats or lies about past activity,[2] and fake devices.[3] In the post-9/11 world, hoax incidents have most frequently manifested themselves in the form of "anthrax" letter hoaxes – in which a benign white powder is posted in the mail with a threatening note to give the impression of an anthrax attack – and, more recently, as airplane bomb scares, in which a supposed radical falsely claims to have placed a bomb aboard a specified flight. Although media reports indicate that many such hoaxes have proven to be jokes made in bad taste or perpetrated by unorganized individuals who lack the desire and/or means to carry out real attacks, there are several terrorist groups who conduct hoaxes in addition to a broad range of destructive terrorism offences.

Hoaxes do not directly threaten human life or property, but they do impose indirect costs on society.[4] Hoaxed anthrax attacks, for instance, result in building evacuations and investigations by hazardous materials (HAZMAT) teams; and hoax bomb scares result in grounded flights and massive airport delays. The costs of policy response can in turn jeopardize human safety, when response resources are diverted away from

real threats, or when responses themselves generate dangerous conditions. More insidious, however, are the psychosocial implications of hoaxes that flow from heightened levels of terrorism-related fear in society.

Hoaxes are thus an easy, low-cost means of generating potentially drastic outcomes. However, in signalling tactical and operational weakness, and undermining future threats of violence, fake terrorism acts can plausibly impose reputational costs on their perpetrators.[5] Why, then, do otherwise capable and motivated terrorist groups hoax, and why do less-capable groups not hoax more often?

This article summarizes findings from extensive multi-method research leveraging publicly-available terrorism events data.[6] It focuses on the answer to a preliminary question: what are the characteristics that differentiate terrorist groups who incorporate hoaxes into their attack profiles from those who never do? With the descriptors of hoaxers and non-hoaxers defined, the discussion turns to an evaluation of the strategic logic(s) underpinning hoax behaviour.

Building Blocks for a Theory of Hoax Behaviour

This study assumes a rationalist model of terrorist group activity: groups will use hoaxes when they contribute to the achievement of their overarching organizational goals, and when hoaxes confer a higher utility than alternate modes of attack.

A wide range of non-exclusive strategic logics may plausibly explain groups' hoax use. First, terrorists may use hoaxes to exploit their low costs, relative to more serious activities[7] – a logic that could be applied to particularly great effect in contexts where groups are seeking a low-cost means of exploiting intergroup dynamics. [8] Second, hoaxes may be used as a complement to destructive activity. Such hoaxes may be incorporated as a component of groups' mixed strategies,[9] designed to waste counterterrorism resources; as dry-runs or intelligence-gathering facilitators, to increase future attacks' chances of success; or as “noise” to drown out simultaneous destructive activities, and thereby decrease the likelihood of appropriate counterterrorist intervention. Third, hoaxes may be used by actors who prefer less-severe alternatives to destructive activity, whether as an outlet for incomplete radicalization to violence, or as an intentional signal of restraint guided by normative imperatives and concern for audience costs. In each case, hoaxes may result from deliberate group strategy – as defined by some central executive – or from principal-agent breakdowns and associated actions of individual group members. Although irrationality is a plausible explanation for non-conforming cases, so too may be flaws inherent to observational data: incidents may be wrongly-attributed, and badly bungled attempts at real attacks may be wrongly documented as intentional hoaxes.

It is expected that different actors will hoax for different reasons. Even within individual groups' campaigns, multiple strategic logics may be simultaneously at play. Equifinality (i.e. that many different pathways can lead to a given outcome) and complex causality are thus likely features of any empirically-substantiated explanation for hoax behaviour.

Existing Literature and Hypothesis Formation

Existing literature commenting on terrorism hoax activity is sporadic, incomplete, and incoherent – largely on account of narrow conceptualizations of “hoax,” and empirical confluences with related event types like false alarms, pranks, threats, and foiled or failed attacks. One point of consensus is that hoaxes are a particular tactic or method of terrorism,[10] alternative to “serious” terrorism. However, it is more instructive to treat hoaxes as a *mode* of terrorism – indicating the fake way in which the act is carried out – than as an alternative *tactic*. A terrorist bomb hoax must be treated as a real terrorist bombing until its hoaxed character is uncovered:[11] divorcing a hoax from the tactic it imitates ignores important context for analyses of emergency response and perpetrator signalling. Furthermore, focusing on hoaxes' conceptual parallels with their insinuated tactics can better situate the study of hoaxes within established literatures from which theoretical frameworks and

empirical foundations may be meaningfully extrapolated.

The literature on factors affecting terrorists' tactical decision-making and lethal capacity is particularly instructive. In the sub-sections that follow, theories and findings from this literature are applied as the basis for hypothesis development regarding terrorist groups' hoax use (and non-use).

Group Motivation

Groups' overarching motivations for terrorism affect the quality and nature of the violence they carry out[12] by determining the range of perceived "legitimate" targets and means.[13] Accordingly, certain motivations should correspond with the use of lower-severity forms of violence like hoaxes, whereas others might predict a preference for severely lethal alternatives. Animal rights and environmentalist ideologies typically involve strong norms of non-violence, manifested in groups' explicit calls to protect human life.[14] This orientation would logically extend to anti-abortionist groups. For groups espousing these motivations, hoaxes may serve as a morally-consistent means of publicizing their cause, spreading fear, and draining responder resources. In the same vein, casualty-averse groups may use practice runs to increase the likelihood of their violent activities being carried out as planned (i.e. with no or limited casualties). Existing research has shown lone actors motivated by single issues to be the most likely to engage in dry runs of their activities.[15] This finding may plausibly extend to group-based perpetrators with the same motivations.

For ease of reference, anti-abortionist, animal rights, and environmentalist motives are collectively referred to herein as the "single issues." This label is not intended in this study to encompass all single-issue or "special interest" terrorist activity.

*H₁: If a terrorist group is motivated by **anti-abortionist, animal rights, or environmentalist** sentiments, it is likely to use hoaxes at some point in its campaign.*

Even if groups lack ideologically-rooted norms opposing violence against humans, they may still prefer to avoid casualties. Ethno-nationalist groups are particularly concerned with presenting themselves as legitimate political alternatives to existing powers.[16] Accordingly, ethno-nationalist groups should be inclined to privilege less-severe forms of violence that do not impose high costs on their constituents. Hoaxes would offer a low-cost means of publicizing such groups' cause without accruing high audience costs (in terms of lost legitimacy), since they *disrupt* infrastructure, rather than *destroy* it.[17]

*H₂: If a terrorist group is motivated by **ethno-nationalism**, it is likely to use hoaxes at some point in its campaign.*

On the other hand, religious groups have been assessed as being particularly lethal when they decide to engage in terrorism.[18] Religiously-motivated terrorists are unconcerned with (earthly) constituents,[19] and their transcendental, absolutist worldviews free them from moral constraints against the use of severe violence.[20] If extreme violence is theologically justified,[21] these actors are unlikely to view hoaxes' inability to cause death or bodily harm as an advantage worth pursuing. Additionally, religious groups maintain a select and reliable membership base that improves their ability to carry out complex and lethal attacks.[22] For these groups, hoaxes' ease of perpetration does not confer a relative advantage over more serious alternatives.

*H₃: If a terrorist group is motivated by **religion**, it is unlikely to ever use hoaxes.*

Organizational Structure

The more hierarchical groups are in their structure, the greater their lethal capacity.[23] As groups become increasingly decentralized, severed lines of communication reduce their ability to carry out large-scale and sophisticated attacks.[24] For groups lacking hierarchy, then, hoaxes' relative simplicity and low costs may be seen as a major benefit over difficult-to-execute sophisticated attacks. Furthermore, groups lacking command and control structures are more vulnerable to principal-agent problems.[25] When groups are wholly decentralized, a wide range of loosely-connected individuals carry out activities in the group's name. In the case of leaderless resistance, for instance, individuals who have not fully radicalized to violence might hoax in an attempt to signal allegiance to a group's cause. In these cases, hoaxes may result when individual actors pursue hoaxes' low costs and risks at the expense of the group's broader strategy.

*H_{4A}: If a terrorist group displays **no hierarchy**, it is likely to use hoaxes at some point in its campaign.*

*H_{4B}: If a terrorist group displays **hierarchy**, it is unlikely to ever use hoaxes.*

Campaign Context

Organizational splits are a positive predictor of violence,[26] and escalating tactical intensity may be a contributing factor in the incidence of group schism to begin with.[27] Splinter groups are thus likely to be particularly extreme in their use of violence, and – in desiring to remain distinct from their “parent” group – unwilling to accept the audience costs of reduced credibility. Such groups are unlikely to engage in low-severity activity, since signalling restraint would be counterproductive to their aims.

*H₅: If a terrorist group emerged **as a radical splinter or offshoot of a less violent group or movement**, it is unlikely to ever use hoaxes.*

Hoaxes are unlikely to achieve the strategic aim of imposing costs on society if the perpetrator lacks sufficient reputational capital to have the hoax believed. Such capital is most effectively acquired by a serious attack track record (i.e. excluding hoaxes and foiled or failed plots). If terrorists play mixed strategies – that is, sequencing hoaxes and violent events in order to keep the counter-terrorists guessing – they can leverage their violent reputations to project power without increasing costs.[28] In this sense, perpetrating a minimum number of serious events serves as a permissive condition for hoax use; where only a few serious events have been carried out, hoaxes are unlikely to confer any strategic value.

*H₆: If a terrorist group perpetrates **only a few serious events**, it is unlikely to ever use hoaxes.*

Data and Explanatory Factors

This study's unit of analysis is the terrorist group, with a binary dependent variable distinguishing groups who never use hoaxes from groups who have used hoaxes at least once within their broader campaigns. Whether the group ever hoaxes is determined based on events captured in the *Monterey Weapons of Mass Destruction (WMD) Terrorism Database* (herein “the WMDDB”; until recently, the world's most comprehensive open-source data set on chemical, biological, radiological, and nuclear [CBRN] terrorism events),[29] *International Terrorism: Attributes of Terrorist Events* (ITERATE; one of the most frequently-cited datasets on transnational terrorist activities),[30] and the *Global Terrorism Database* (GTD).[31] The WMDDB and ITERATE are the only publicly-available events databases which explicitly capture hoax activity as possible event types; in the GTD, hoax activity – although excluded as a possible event type – can be subjectively evaluated via the “fake weapons” weapon type and associated event summaries.

The study’s sample is a cross-section of all perpetrator groups identified in the WMDDDB who were responsible for at least one realized violent event – or credible threat thereof – in either the WMDDDB, ITERATE, or GTD. This sample was selected for its manageable size ($n = 81$, after culling perpetrators that do not meet the study’s standards for established terrorist entities, as compared with over 1,200 discrete perpetrators in ITERATE), but also because groups committing CBRN offenses represent a hard case for hoaxing: in having crossed or attempted to cross the unconventional weapons threshold, terrorists with an interest in CBRN weaponry are the most extreme in their tactical preferences. Their use of hoaxes, at the complete opposite end of the severity spectrum, is particularly puzzling.

A second sample ($n = 42$) comprising all terrorist group perpetrators named in the *Canadian Incident Database* (CIDB) contributes comprehensive data within a single country context.[32] This CIDB-based sample controls for bias resulting from the limited scope of events captured in the WMDDDB (no conventional weapons incidents), ITERATE (no domestic incidents), and the GTD (inconsistent hoax coverage); as well as bias resulting from the primary sample’s requirement that groups display an interest in CBRN.

Explanatory factors (defined in Table 1) were coded independently by the author, based on open-source data. In addition to the datasets’ event descriptions, primary sources of data were group descriptions from Terrorist Organization Profiles (TOPs)[33] and Jane’s World Insurgency and Terrorism.[34] Where this information was insufficient, secondary sources were consulted, privileging in the following order: government reports, peer-reviewed academic resources, and news archives. For consistency with extant scholarship, coding decisions (where samples overlap) were checked against those assigned in existing perpetrator databases.[35]

Table 1. Definitions of Explanatory Factors

FACTOR NAME (SHORT-HAND)		DEFINITION
MOTIVE	Single-Issue (SINGLEISSUE)	1 = anti-abortionist, animal-rights, or environmentalist motivation 0 = motive is not anti-abortionist, animal-rights, or environmentalist
	Left or Right (LEFTRIGHT)	1 = broadly left- or right-wing motivation, including single issues 0 = motive is neither left- or right-wing, nor single-issue
	Purely Ethno-Nationalist (PUREETHNO)	1 = exclusively ethno-nationalist motivation 0 = group’s ideology contains any non-ethno-nationalist component
	Contains Ethno-Nationalism (CONTAINETHNO)	1 = motivation contains an ethno-nationalist component 0 = motivation does not contain an ethno-nationalist component
	Purely Religious (PURERELIG)	1 = exclusively religious motivation 0 = group’s ideology contains any non-religious component
	Contains Religion (CONTAINRELIG)	1 = motivation contains a religious component 0 = motivation does not contain a religious component
STRUC- TURE	Hierarchy (HIERARCHY)	1 = 1 group displays some degree of hierarchy (i.e. leadership or command and control are present) 0 = group displays no hierarchy; market structure
CAMPAIGN CONTEXT	Splinter (SPLINTER)	1 = group originated as a radical splinter 0 = group did not originate as a radical splinter
	More than a few serious events (SERIOUS)	1 = group committed more than 3 serious events 0 = group committed 3 or fewer serious events

The “more than a few serious events” variable’s three-event threshold was empirically-derived, based on tests for bivariate consistency. Above this threshold, there is a substantial degree of unimportant variation: there is no difference in hoax behaviour between a group perpetrating four serious events or 2,494 (the maximum value in the sample), but groups perpetrating four or more serious events are qualitatively different from those perpetrating three or fewer. Fuzzy scoring alternatives do not improve this factor’s performance.

Models and Methods

While probit regression models on this data yielded fairly robust results,[36] the correlational logic that underpins probit is a mismatch for the question at hand. Although infrequently applied in terrorism studies, Qualitative Comparative Analysis (QCA) offers a better fit for evaluating hoax use. QCA is an exploratory technique that searches for factors that – in isolation or in combination – are sufficient to produce a given outcome. It thus accounts for equifinality, elucidating factors that are important in some cases and under certain conditions, if not for the entire sample on average. QCA is built on the logic of sets. In set theory, the inverse of what explains an outcome does not necessarily explain the outcome’s negation: causality is asymmetric.

Since this study’s hypotheses are not mutually exclusive nor are their associated strategic logics expected to apply equally across all cases, QCA’s ability to capture asymmetric causality and equifinality confers important advantages over more traditional approaches. The study’s motivational hypotheses illustrate this point. Basic cross-tabulations indicate that, while single-issue motivations may be sufficient for explaining hoax use, lacking a single-issue motivation has no bearing on the hoax outcome (see Table 2); despite embodying a perfect set relation, the variables for hoaxing and single-issue motivation have only a 40.73% correlation. The disjoint between the strong set relation and weak correlation occurs because the set of non-single-issue groups encompasses many kinds of groups: some whose motivations predict hoax use (ethno-nationalist); some whose motivations predict non-hoaxing (religious); and some whose hoax (non-) use is determined by non-motivational factors altogether.

Table 2. Cross-tabulation of Single-issue Motivation as a Sufficient Condition for Hoaxing

		<i>single-issue</i>		
		0	1	Total
<i>hoaxer</i>	0	58	0	58
	1	18	5	23
Total		76	5	81

The following section presents and discusses results from two QCA models, each testing for the hoaxer and non-hoaxer outcome. The two models differ in the measures used to capture group motivation, with Model A’s variables indicating mutually-exclusive motivations, and Model B allowing for combined motives and a broadened definition of the animal rights, environmentalist, and anti-abortionist motive to also include the right- and left-wing economic motivations they are traditionally grouped with. This combined broadly left- and right-wing variable is used to probe whether single-issue motivations generate an independent effect, or whether their role is driven by non-hierarchical structure: a necessary test, given that all of the sample’s single-issue groups also lack hierarchy. In all cases, I apply a consistency threshold of 0.8 (i.e. at least 80% of groups displaying the same combinations of factors must agree on the outcome) and a frequency threshold of two (i.e. at least two observed cases must exhibit the same combinations of factors to be considered in the solution).

Results are presented (Table 3) using the following notation: “ ~ ” indicates the negation of a factor or the outcome; “ * ” indicates the logical AND; and “ + ” indicates the logical OR.

Results and Discussion

The solution coverage measures indicate that the models are better at identifying groups that never use hoaxes (accounting for 67.2 – 75.9% of non-hoaxers) than they are at identifying groups that sometimes do hoax (accounting for 30.4% of hoaxers). This discrepancy in coverage indicates that hoaxing groups tend to follow more idiosyncratic pathways to hoaxing; they are not captured by the two case minimum frequency threshold applied here.

In Model A, the single-issue motivations appear as an independent, sufficient condition for hoaxing, accounting for 21.7% of hoaxing groups. However, since all observed single-issue groups also lack hierarchy, this solution rests on the simplifying assumption that single-issue groups displaying hierarchy would also hoax if they were to exist. Given the consistent presence of non-hierarchy in solutions for hoaxing, and of hierarchy in solutions for non-hoaxing, this counterfactual is implausible.

Table 3. QCA Models and their Minimized Solutions (WMDDDB-based Sample)

MODEL A	$HOAXER = f(SINGLEISSUE, PUREETHNO, PURERELIG, HIERARCHY, SPLINTER, SERIOUS)$	
	$SINGLEISSUE + (PUREETHNO * \sim HIERARCHY) \rightarrow HOAXER$	
	Solution coverage: 0.304	Solution consistency: 0.875
	$\sim HOAXER = f(SINGLEISSUE, PUREETHNO, PURERELIG, HIERARCHY, SPLINTER, SERIOUS)$	
MODEL B	$\sim PURERELIG * (HIERARCHY * \sim PUREETHNO + \sim SERIOUS) + PURERELIG * SPLINTER \rightarrow \sim HOAXER$	
	Solution coverage: 0.759	Solution consistency: 0.917
	$HOAXER = f(LEFTRIGHT, CONTAINETHNO, CONTAINRELIG, HIERARCHY, SPLINTER, SERIOUS)$	
	$\sim CONTAINRELIG * \sim HIERARCHY * SERIOUS \rightarrow HOAXER$	
MODEL B	Solution coverage: 0.304	Solution consistency: 1
	$\sim HOAXER = f(LEFTRIGHT, CONTAINETHNO, CONTAINRELIG, HIERARCHY, SPLINTER, SERIOUS)$	
	$CONTAINRELIG * (CONTAINETHNO + SPLINTER) + LEFTRIGHT * HIERARCHY \rightarrow \sim HOAXER$	
	Solution coverage: 0.672	Solution consistency: 0.929

When the non-exclusive motivation variables are used, the solution has the same degree of coverage, but indicates more generally that any motivation – as long as it lacks any religious component – combines with non-hierarchy and the perpetration of at least three serious events to produce the hoax outcome. However, this sufficient combination disappears when the single-issue groups are removed from the sample, meaning that economically-oriented groups who are non-hierarchical and carry out more than three real attacks do not hoax with adequate consistency to generate a sufficient condition on their own. Accordingly, the effect of single-issue motivations on hoaxing is overdetermined, but their normative orientation likely still plays a role.

Not only does a lack of hierarchy contribute to hoax use, but the presence of hierarchy is also associated with hoax non-use. Still, group structure is never sufficient on its own for predicting whether or not a group will hoax. Non-hierarchy must combine with any non-religious ideology and the minimum serious event threshold to generate the hoax outcome. The range of possible motives in this solution points to principal-agent problems as an underlying driver of hoax use.

Religious and ethno-nationalist ideologies also affect groups’ hoax use. Although QCA is unable to reject the null hypothesis with respect to ethno-nationalism’s individual effect on hoaxing, the results support a new hypothesis: that religious ethno-nationalists are particularly unlikely to ever use hoaxes. Religious ideology also exerts an effect on groups’ hoax behaviour, independent of ethno-nationalism: religious ideology combines with radical splinter histories to explain why some groups never hoax. Unlike for the other motives, the presence of

religion never requires the co-presence or co-absence of hierarchy. This finding suggests that the positive effect of religious ethno-nationalists and/or religious splinters on non-hoaxing is sufficiently strong to override any moderating role that a lack of hierarchy might otherwise play.

Although it is never a sufficient condition on its own, where the number of events perpetrated figures into solutions, it confirms a symmetrical relationship: having committed more than three serious events is sometimes associated with groups' use of hoaxes; and having committed three or fewer serious events is sometimes associated with non-hoaxing. It appears that the three-event minimum threshold accords perpetrators sufficient reputational capital to force counterterrorist response and hoax without otherwise signalling weakness and undermining their credibility for future attacks.

A QCA analysis of the CIDB-based sample generally corroborates these findings.[37] The only substantial difference in results across the two samples pertains to the effect of a group's splinter origins on hoax behaviour. For the WMDDDB-based sample, splinter origins combined with religious motivation to explain non-hoaxing. For the CIDB-based sample, splinter origins contribute to both the hoax and non-hoax outcome, magnifying the expected effect of the corresponding motivational (religion or ethno-nationalism) or structural (hierarchy or non-hierarchy) feature – in either direction. The hypothesized mechanisms may still hold: if ethno-nationalist groups prefer to stay within the realm of legitimate politics, low-severity hoaxes may be an attractive middle ground when group schism would otherwise encourage more violent forms of action.

While it is difficult to derive conclusions regarding groups' intent based on purely observational data, these findings suggest that groups' use of hoaxes may result most substantially from principal-agent problems and individual members' cost-benefit analyses, rather than an overarching strategic logic for the group. If groups are hoaxing strategically, their logic is not clearly indicated by broad-based organizational characteristics, but by particularities of the group and its circumstances. These same organizational characteristics, however, are sufficient in most cases for precluding groups' incorporation of hoaxes into their campaign activities.

Conclusions and Future Hoax Research

This study used QCA to identify a range of characteristics (and combinations of characteristics) that differentiate terrorist groups who never use hoaxes from those who sometimes do. Consistency across two distinct samples speaks to the explanatory factors' robustness, and to the ability of existing cross-national databases that code for hoaxes to provide insight into group behavior. They may lack nuance and coverage at the event-level, but when transformed to the group-level, these datasets provide a fairly accurate picture.

Unfortunately, group-level cross-sectional analyses of terrorism hoax behaviour have only limited counterterrorism applications. Although the motivational, organizational, and campaign contextual factors identified above can distinguish between hoaxers and non-hoaxers, they cannot identify which events are real or hoaxed. Fortunately, the QCA solutions describing which groups never hoax have substantial coverage and consistency. Activities of groups displaying these characteristics should always be taken very seriously. The QCA solutions will wrongly identify a hoaxing group as a non-hoaxing one about 9% of the time, but it is a safer bet to rely on a framework that wrongly treats hoaxes as real than the other way around.

This study framed the discussion of group-based characteristics differentiating hoaxers from non-hoaxers in the context of perpetrators' underlying strategic logics. While the explanatory factors used can indirectly corroborate the presence of certain logics, they do not purport to represent direct tests thereof. It is impossible to disentangle – based on observational events and perpetrator characteristics alone – which logics are truly driving hoax activity. Events-based analyses with temporal and qualitative components can be used to move research on hoaxes forward and probe the question of strategic logic more appropriately.

Events-based research, however, remains vulnerable to the flaws and limitations of terrorism events datasets,[38] many of which are accentuated when dealing with hoaxes.[39] A comparison of the datasets consulted in the present study reveals that the frequently-used GTD, ITERATE, and WMDDDB substantially underestimate the

incidence of terrorism, especially hoaxes. With time periods held constant, the CIDB captures over ten times more terrorism incidents in Canada than the cross-national datasets, and between 2.5 and 12.9 times more hoax incidents. The cross-national databases, although they yielded valuable group-level insights here, are thus inappropriate for events-level analysis of hoax activity. A feasible alternative is to focus new collection efforts on individual groups' campaigns.[40] In providing profiles of likely hoaxers and non-hoaxers, the present study's findings can be leveraged as an empirically-informed launchpad to identify such groups and campaigns for meaningful comparison.

About the Author: **Nicole A. Tishler** is a Research Fellow at Carleton University's Norman Paterson School of International Affairs and a Policy Analyst for the Government of Canada. Her research addresses various dimensions of terrorism studies (emphasizing tactical decision-making and weapons adoption as well as counter-terrorism policy). She received her Ph.D. in International Affairs from Carleton University in 2017. Her award-winning thesis is available at URL: <https://curve.carleton.ca/42bfc43c-dce7-40f6-8830-3d94834dc3f4>.

Disclaimer: The author's views are her own and do not reflect endorsement by the Government of Canada.

Notes

[1] This sub-category of hoaxing is meaningfully addressed in Erin M. Kearns, Brendan Conlon, and Joseph K. Young, "Lying about Terrorism," *Studies in Conflict & Terrorism* 37, no. 5 (2014): 430-31; and Rommel C. Banlaoi, "Media and Terrorism in the Philippines: The Rajah Solaiman Islamic Movement," *Journal of Policing, Intelligence and Counter Terrorism* 4, no. 1 (2009): 64.

[2] This sub-category of hoaxing is meaningfully addressed in Charles W. Mahoney, "More Data, New Problems: Audiences, Ahistoricity, and Selection Bias in Terrorism and Insurgency Research," *International Studies Review* 0 (2017): 14-17; Walter Enders, Gerald F. Parise, and Todd Sandler, "A Time-Series Analysis of Transnational Terrorism: Trends and Cycles," *Defence Economics* 3, no. 4 (309); and Gavin Cameron et al., "1999 WMD Terrorism Chronology: Incidents Involving Sub-National Actors and Chemical, Biological, Radiological, and Nuclear Materials," *The Nonproliferation Review* (Summer 2000): 158.

[3] This sub-category of hoaxing is meaningfully addressed in John Horgan and John F. Morrison, "Here to Stay? The Rising Threat of Violent Dissident Republicanism in Northern Ireland," *Terrorism and Political Violence* 23 (2011): 650; and Kate Ivanova and Todd Sandler, "CBRN Attack Perpetrators: An Empirical Study," *Foreign Policy Analysis* 3 (2007): 276.

[4] For general demonstrations of indirect costs, see Walter Enders, Gerald Parise and Todd Sandler, "A Time-Series Analysis of Transnational Terrorism," 316; and Paul Starett Wallace Jr., *Anti-Hoax Legislation in the 107th Congress: Addressing Problems Since September 2001*, CRS Report for Congress RL31314 (Library of Congress, 2002), 1. Importantly, hoaxes impose socio-psychological costs [see T.J. Dougherty, T. Green, and T. Harrington, "Anthrax: A Biologic or Psychologic Threat?," *Journal of Toxicology - Clinical Toxicology* 39, no. 5 (2001); and Louis O. Giuffrida, "Selected Papers from: International Terrorism: Threats and Responses," *Terrorism* 10 (1987): 75]. Hoaxes also place unnecessary strains on emergency response capabilities [see Chris Dishman, "Understanding Perspectives on WMD and Why They Are Important," *Studies in Conflict & Terrorism* 24, no. 4 (2001): 311] and over-extend security service response units [see John Horgan and John Morrison, "Here to Stay?," 650; Chris Ryder, *A Special Kind of Courage: 321 EOD Squadron-Battling the Bombers* (London: Methuen, 2005), 50 and 128]. They may also impose costs borne by commercial interests [see Rachel Monaghan, "Single-Issue Terrorism: A Neglected Phenomenon?," *Studies in Conflict & Terrorism* 23, no. 4 (2000): 258-59; Rachel Monaghan, "Not Quite Terrorism: Animal Rights Extremism in the United Kingdom," *Studies in Conflict & Terrorism* 36 (2013): 936; Stéphane Leman-Langlois and Jean-Paul Brodeur, "Terrorism Old and New: Counterterrorism in Canada," *Police Practice & Research* 6, no. 2 (2005): 128; Walter Enders and Todd Sandler, "Causality Between Transnational Terrorism and Tourism: The Case of Spain," *Terrorism* 14, no. 1 (1991): 53]. Hoaxes may also lead to policy concessions by governments [see Louis René Beres, "Israel, the 'Peace Process,' and Nuclear Terrorism: Recognizing the Linkages," *Studies in Conflict & Terrorism* 21, no. 1 (1998): 70; Yonah Alexander Editor and Jerrold M. Post, "The George Washington University Conferences on Terrorism," *Terrorism* 13, no. 2 (1990): 168; Paul Leventhal and Brahma Chellaney, "Nuclear Terrorism: Threat, Perception, and Response in South Asia," *Terrorism* 11, no. 6 (1988): 449] and even pre-emptive actions [see Christopher C. Joyner, "The Rabta Chemical Factory Fire: Rethinking the Lawfulness of Anticipatory Self-Defence," *Terrorism* 13, no. 2 (1990)].

[5] Charles Mahoney ("More Data, New Problems," 14-17) explores how terrorist groups' empty threats affect their reputational capital in the context of costly signalling or bargaining.

[6] Nicole Tishler, "Fake Terrorism: Examining Terrorist Groups' Resort to Hoaxing as a Mode of Attack" (PhD diss., Carleton University, 2017), available at URL: <https://curve.carleton.ca/42bfc43c-dce7-40f6-8830-3d94834dc3f4>

- [7] W. Enders, T. Sandler, and J. Cauley, "UN Conventions, Technology, and Retaliation in the Fight Against Terrorism: An Econometric Evaluation," *Terrorism and Political Violence* 2, no. 1 (1990): 101.
- [8] Kearns, Conlon, and Young, "Lying About Terrorism," 426.
- [9] Charles Mahoney, "More Data, New Problems," 17.
- [10] See, for example, Alexander P. Aguirre, "The Philippine Response to Terrorism," *Journal of Policing, Intelligence and Counter Terrorism* 4, no. 1 (2009), 47; W. Enders, T. Sandler, and J. Cauley, "UN Conventions, Technology, and Retaliation in the Fight Against Terrorism"; John Horgan and John Morrison, "Here to Stay?"; and Anthony Richards, "Conceptualizing Terrorism," *Studies in Conflict & Terrorism* 37, no. 3 (2014): 222.
- [11] Walter Enders and Todd Sandler, *The Political Economy of Terrorism* (Cambridge, Cambridge University Press: 2012), 72; H.D. Munroe, "The October Crisis Revisited: Counterterrorism as Strategic Choice, Political Result, and Organizational Practice," *Terrorism and Political Violence* 21 (2009): 299; and Chris Ryder, *A Special Kind of Courage*, 50–56; 128.
- [12] Martha Crenshaw Hutchinson, "The Concept of Revolutionary Terrorism," *The Journal of Conflict Resolution (pre-1986)* 16, no. 3 (1972); C.J.M. Drake, "The Role of Ideology in Terrorists' Target Selection," *Terrorism and Political Violence* 10, no. 2 (1998); Bruce Hoffman, *Inside Terrorism* (New York, Columbia University Press: 2006); David C. Rapoport, "The Four Waves of Rebel Terror and September 11," *Anthropoetics* 8, no. 1 (2002).
- [13] C.J.M. Drake, "The Role of Ideology," 59.
- [14] Zachary Kallenborn and Philipp C. Bleek, "Avatars of the Earth: Radical Environmentalism and Chemical, Biological, Radiological, and Nuclear (CBRN) Weapons," *Studies in Conflict & Terrorism* (2018): 8; Dave Foreman, "Strategic Monkeywrenching," in *Ecodefense: A Field Guide to Monkeywrenching*, eds. David Foreman and Bill Haywood (1993); URL: <https://theanarchistlibrary.org/library/various-authors-ecodefense-a-field-guide-to-monkeywrenching> ; "The ALF Primer: A Guide to Direct Action and the Animal Liberation Front," Animal Liberation Front (2002); URL: <http://www.animalliberationfront.com/ALFront/ALFPrime.htm> .
- [15] Paul Gill, John Horgan, and Paige Deckert, "Bombing Alone: Tracing the Motivations and Antecedent Behaviors of Lone-Actor Terrorists," *Journal of Forensic Sciences* 59, no 2 (2014): 432.
- [16] Kim Cragin, "Learning to Survive: The Case of the Islamic Resistance Movement (Hamas)," in *Teaching Terror: Strategic and Tactical Learning in the Terrorist World*, ed. James J.F. Forest (Lanham: Rowman and Littlefield, 2006), 199.
- [17] See John Horgan and John Morrison, "Here to Stay?," 650.
- [18] Victor Asal, Gary Ackerman, and R. Karl Rethemeyer, "Connections Can be Toxic: Terrorist Organizational Factors and the Pursuit of CBRN Weapons," *Studies in Conflict and Terrorism* 35 (September 2012): 237; Victor Asal and R. Karl Rethemeyer, "The Nature of the Beast: Organizational Structures and the Lethality of Terrorist Attacks," *The Journal of Politics* 70, no. 02 (2008); Audrey Kurth Cronin, "Behind the Curve: Globalization and International Terrorism," *International Security* 27, no. 3 (2003): 41-42; Bruce Hoffman, *Inside Terrorism*, 82-130; Joshua Kilberg, "A Basic Model Explaining Terrorist Group Organizational Structure," *Studies in Conflict & Terrorism* 35 (2012); Eli Berman, *Radical, Religious, and Violent: The Economics of Terrorism* (Cambridge: MIT Press, 2009); Eli Berman and David D. Laitin, "Religion, Terrorism and Public Goods: Testing the Club Model," *Journal of Public Economics* 92 (2008).
- [19] Victor Asal and R. Karl Rethemeyer, "The Nature of the Beast: Organizational Structures and the Lethality of Terrorist Attacks," *The Journal of Politics* 70, no. 02 (2008): 439; Audrey Kurth Cronin, "Behind the Curve," 41-42.
- [20] Bruce Hoffman, *Inside Terrorism*, 88-89;
- [21] Mark Juergensmeyer, "The Logic of Religious Violence," in *Inside Terrorist Organizations*, ed. David C. Rapoport (London: Frank Cass, 1988).
- [22] Eli Berman, *Radical, Religious, and Violent*; Eli Berman and David D. Laitin, "Religion, Terrorism and Public Goods."
- [23] Joshua Kilberg, "A Basic Model"; Lindsay Heger, Danielle Jung, and Wendy H. Wong, "Organizing for Resistance: How Group Structure Impacts the Character of Violence," *Terrorism and Political Violence* 24, no. 5 (2012).
- [24] Max Abrahms and Philip B.K. Potter, "Explaining Terrorism: Leadership Deficits and Military Group Tactics," *International Organization* 69 (Spring 2015): 318–19; Walter Enders and Todd Sandler, *The Political Economy of Terrorism*, 239; Lindsay Heger, Danielle Jung, and Wendy H. Wong, "Organizing for Resistance," 745–47; David A. Siegel and Joseph K. Young, "Simulating Terrorism: Credible Commitment, Costly Signalling, and Strategic Behavior," *PS: Political Science & Politics* 42, no. 4 (2009): 768; Jeremy M. Weinstein, *Inside Rebellion: The Politics of Insurgent Violence* (New York: Cambridge University Press, 2007), 131; Joshua Kilberg, "A Basic Model."
- [25] Lindsay Heger, Danielle Jung, and Wendy H. Wong, "Organizing for Resistance," 746. Kearns, Conlon, and Young, "Lying About

Terrorism,” 428–29.

[26] Victor Asal, Mitchell Brown, and Marcus Schulzke, “Kill Them All—Old and Young, Girls and Women and Little Children: An Examination of the Organizational Choice of Targeting Civilians,” *Political Science Research and Methods* 3, no. 03 (2015).

[27] Victor Asal, Mitchell Brown, and Angela Dalton, “Why Split? Organizational Splits Among Ethnopolitical Organizations in the Middle East,” *Journal of Conflict Resolution* 56, no. 1 (2012).

[28] Charles Mahoney, “More Data, New Problems,” 17.

[29] Monterey Terrorism Research and Education Program, *Monterey Weapons of Mass Destruction Terrorism Database* (Monterey: Monterey Institute of International Studies, 2012).

[30] Edward F. Mickolus et al., *International Terrorism: Attributes of Terrorist Events* (Dunn Loring: Vinyard Software, 2012).

[31] National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database* (College Park: START, 2016).

[32] *Canadian Incident Database* (Canadian Network for Research on Terrorism, Security and Society, 2016); URL: www.extremism.ca.

[33] Developed by the Memorial Institute for the Prevention of Terrorism’s Terrorism Knowledge Base.

[34] Developed by IHS Markit.

[35] Victor Asal, R. Karl Rethemeyer, and Ian Anderson, *Big Allied and Dangerous (BAAD) Database 1 – Lethality Data, 1998-2005* (Harvard Dataverse); URL: [doi:hdl/1902.1/16062](https://doi.org/10.7927/H729-116062); Seth G. Jones and Martin C. Libicki, *How Terrorist Groups End: Lessons for Countering al Qaeda* (Santa Monica: RAND Corporation, 2008); Dane Rowlands, Jez Littlewood, and Joshua Kilberg, *CBRN Terrorism: Assessing the Threat of CBRN Terrorism by Groups and Individuals in Canada and Worldwide* (Ottawa: Norman Paterson School of International Affairs [unpublished], 2012); Joshua Kilberg, “Organizing for Destruction: How Organizational Structure Affects Terrorist Group Behaviour,” (PhD diss., Carleton University, 2011); URL: <https://curve.carleton.ca/d33e92f3-a02f-4a8c-b668-bbdb0f1e4cdb>.

[36] Nicole Tishler, “Fake Terrorism,” 123-133.

[37] Nicole Tishler, “Fake Terrorism,” 242-248.

[38] See, for instance, Gary Ackerman and Lauren Pinson, “Speaking Truth to Sources: Introducing a Method for the Quantitative Evaluation of Open Sources in Event Data,” *Studies in Conflict & Terrorism* 39, no. 7-8 (2016): 622; Gary LaFree, “The Global Terrorism Database (GTD): Accomplishments and Challenges,” *Perspectives on Terrorism* 4, no. 1 (2010): 24; Edward F. Mickolus, “How Do We Know We’re Winning the War Against Terrorists? Issues in Measurement,” *Studies in Conflict & Terrorism* 25, no. 3 (2002): 151-54; Charles Mahoney, “More Data, New Problems,” 17; and Ivan Sascha Sheehan, “Assessing and Comparing Data Sources for Terrorism Research,” in *Evidence-Based Counterterrorism Policy*, eds. Cynthia Lum and Leslie W. Kennedy (Springer, 2012).

[39] See, for instance, Erik Dahl, “The Plots that Failed: Intelligence Lessons Learned from Unsuccessful Terrorist Attacks Against the United States,” *Studies in Conflict & Terrorism* 34, no. 8 (2011): 625; Jennifer Giroux, Peter Burgherr, and Laura Melkunaite, “Research Note on the Energy Infrastructure Attack Database (EIAD),” *Perspectives on Terrorism* 7, no. 6 (2013): 120; John Horgan and John Morrison, “Here to Stay?,” 650; Edward F. Mickolus, “How Do We Know We’re Winning,” 154; Charles Mahoney, “More Data, New Problems,” 14-17.

[40] Charles Mahoney, “More Data, New Problems,” 15.